

## Permitting Decisions- Environment Agency Initiated Variation

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We have issued an Environment Agency initiated variation for Greystone Quarry Waste Facility operated by M.D.J Light Brothers (Scrap Processors) Limited following a review of the permit in accordance with Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1).

The variation number is EPR/KP3894HG/V003.

### Permit Review

The Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016 (EPR), regulation 34(1), to periodically review permits. Article 21(3) of the Industrial Emissions Directive (IED) also requires the Environment Agency to review conditions in permits to ensure that they deliver compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

We have reviewed the permit for this regulated facility and varied the permit to make a number of changes to reflect relevant standards and best practice. These changes principally relate to the implementation of our technical guidance for WEEE treatment and transfer, and Treating metal waste in shredders, including the relevant requirements of the BAT Conclusions for Waste Treatment which have been incorporated into our guidance.

In this decision document, we set out the reasoning for the variation notice that we have issued.

It explains how we have reviewed and considered the techniques used by the operator in the operation and control of the plant and activities of the installation (operating techniques) against our technical guidance.

As well as considering the review of the operating techniques used by the Operator for the operation of the plant and activities of the installation, the consolidated variation notice takes into account and brings together in a single document all previous variations that relate to the original permit issue. Where this has not already been done, it also modernises the entire permit to reflect the conditions contained in our current generic permit template.

## Purpose of this document

This decision document provides a record of the decision making process. It:

- explains how the Environment Agency initiated variation has been determined;
- summarises the decision making process in the [decision considerations](#) section to show how the main relevant factors have been taken into account;
- highlights [key issues](#) in the determination.

Read the permitting decisions in conjunction with the environmental permit and the variation notice.

## Key issues of the decision

### Appropriate Measures assessed in this permit review

The activities carried out at this regulated facility fall under the following Appropriate Measures:

- Treating metal waste in shredders: appropriate measures for permitted facilities
- Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities
- Waste temperature exchange equipment: appropriate measures for permitted facilities
- Non-hazardous and inert waste: appropriate measures for permitted facilities
- End of life vehicles (ELVs): appropriate measures for permitted facilities

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 20/04/2022. The Non-hazardous and inert waste: appropriate measures for permitted facilities was published 12/07/2021, and the End of life vehicles (ELVs): appropriate measures for permitted facilities was published 19/10/2023. Because the two Appropriate Measures referenced above were published after the Regulation 61 Notice was sent to the operator, we have decided not to assess these during this review of the permit.

The waste operations AR12, AR13, and AR14 have been revised only to include information provided by the operator during the review of this permit.

## **Environment Agency led variation – permit review**

We have carried out an Environment Agency initiated variation to the permit following a permit review as required by legislation to ensure that permit conditions deliver compliance with relevant legislative requirements and appropriate standards to protect the environment and human health.

The Industrial Emissions Directive (IED) came into force on 7 January 2014 with the requirement to implement all relevant Best Available Techniques (BAT) Conclusions as described in the Commission Implementing Decision. Article 21(3) of the IED requires the Environment Agency to review conditions in permits that it has issued and to ensure that the permit delivers compliance with relevant standards, within four years of the publication of updated decisions on Best Available Techniques (BAT) Conclusions.

The BAT Conclusions for Waste Treatment (the BREF) was published on 17 August 2018 following a European Union wide review of BAT, implementing decision (EU) 2018/1147 of 10 August 2018. Relevant existing facilities were expected to be in compliance with the BAT Conclusions within 4 years (i.e. by August 2022).

On 13th July 2022 our WEEE (waste electrical and electronic equipment) appropriate measures guidance was published on gov.uk. This guidance includes additional appropriate measures for WTEE (waste temperature exchange equipment). This technical guidance explains the standards (appropriate measures) that are relevant to regulated facilities with an environmental permit to treat or transfer WEEE (including WTEE) and incorporates the relevant requirements of the BAT Conclusions.

The Appropriate Measures guidance for treating metal waste in shredders, published 20 October 2021, is also applicable to the permitted activities being varied under this permit review and has been included in the operating techniques table.

We issued a notice under regulation 61(1) of the Environmental Permitting (England and Wales) Regulations 2016 (a Regulation 61 Notice) on 20/04/2022 requiring the operator to provide information to confirm that the operation of their facility currently meets, or how it will subsequently meet, the standards (appropriate measures) described in our technical guidance.

The notice required that where the revised standards are not currently met, the operator should provide information that:

- Describes the techniques that will be implemented to ensure operations meet the relevant standards and by when, or
- Explains why they are not applicable to the facility in question, or

- Justifies why an alternative technique is appropriate and will achieve an equivalent level of environmental protection to the standards described in our guidance

The standards described in our technical guidance are split into 7 chapters:

- General management appropriate measures
- Waste pre-acceptance, acceptance and tracking appropriate measures
- Waste storage, segregation and handling appropriate measures
- Waste treatment appropriate measures
- Emissions control appropriate measures
- Emissions monitoring and limits appropriate measures
- Process efficiency appropriate measures

The WTEE appropriate measures guidance, which supplements the WEEE technical guidance, includes an additional chapter on process monitoring.

We have set emission limit values (ELVs) and monitoring requirements for relevant substances in line with our technical guidance and the BAT Conclusions for Waste Treatment, unless a tighter, i.e. more stringent, limit was previously imposed and these limits have been carried forward.

The Regulation 61 notice required the operator to confirm whether they could comply the standards described in each of these chapters. Table 1 below provides a summary of the response received and our assessment of it. The overall status of compliance with the standards (appropriate measures) is indicated in the table as:

NA – Not Applicable

CC – Currently Compliant

FC – Compliant in the future (through improvement conditions set in permit)

NC – Not Compliant

In accordance with Article 22(2) of the Industrial Emissions Directive, the Regulation 61 notice asked the operator to provide a soil and groundwater risk assessment, along with a baseline report or summary report confirming the current state of soil and groundwater contamination, where listed activities are undertaken that involve the use, production or release of relevant hazardous substances.

The Regulation 61 notice also asked the operator to confirm whether they operate a medium combustion plant or specified generator (as per Schedule 25A or 25B of EPR 2016) and whether they had considered how their operations could be affected by climate changes (e.g. through a climate change adaptation plan).

Our assessment of the responses received from the operator regarding soil and groundwater risk assessment, medium combustion plant and specified generators, and consideration of climate change are also summarised in Table 1.

The Regulation 61 notice response from the Operator was received on 07/09/2022.

We considered that the response did not contain sufficient information for us to commence determination of the permit review. We therefore issued a further information request to the operator. Suitable further information was provided by the operator on 07/03/2024.

Although we were able to consider the Regulation 61 notice response generally satisfactory at receipt, we needed more information in order to complete our permit review assessment. We requested this by email and the operator provided further information on the below subjects on 26/07/2024, 10/09/2024, and 16/10/2024. We made a copy of this information available on our public register:

- The treatment capacities of each activity
- Descriptions of how waste is stored before and after treatment for each activity
- A revised site plan
- Information on the abatement systems
- Clarification on how compressors are stored
- Further information on the fridge treatment activities
- Clarification on how the operator stores shredder non-metallic fractions
- How the metal shredding activities minimise fugitive emissions
- Detail of their current compliance with the appropriate measures regarding measuring the blowing agent destruction efficiency

**Table 1 – Summary of our assessment of the operator’s Reg 61 response**

<b>Appropriate measures</b>	<b>Compliance status</b>	<b>Assessment of the installation’s compliance with relevant standards (appropriate measures) and any alternative techniques proposed by the operator</b>
<b>General management appropriate measures</b>	FC	<p>The operator confirmed that they currently meet the requirements of the appropriate measures in this section except for all Appropriate Measures within ‘Waste electrical and electronic equipment (WEEE): appropriate measures for permitted facilities’ Section 2.6 Plant decommissioning, which requires the operator to have and maintain a decommissioning plan. The operator has confirmed that a plant decommissioning plan can be provided upon request. Improvement condition IC10 has been included in the varied permit to address this.</p> <p>Improvement Condition IC2, requiring the operator to produce a written management system, has not yet been signed off as complete. As a result of this, further information the management system has not been requested during the review of this permit, as this issue is being addressed by the Area Officer. The original deadline of ‘6 months from permit issue date’ has been retained.</p> <p>Compliance with the other Appropriate Measures (relevant to the site) in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</p>
<b>Waste pre-acceptance, acceptance and tracking appropriate measures</b>	FC	<p>The operator confirmed that they currently meet the requirements of all appropriate measures in this section.</p> <p>However, Improvement Condition IC2, requiring the operator to produce waste pre-acceptance and acceptance procedures, has not been signed off yet as complete. As a result of this, further information waste pre-acceptance and acceptance procedures has not been requested during the review of this permit, as this issue is</p>

		<p>being addressed by the Area Officer. The original deadline of '6 months from permit issue date' has been retained, and the compliance status of 'future compliant' has been included due to the outstanding improvement condition.</p> <p>Compliance with the other Appropriate Measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</p>
<p><b>Waste storage, segregation and handling appropriate measures</b></p>	<p>FC</p>	<p>The operator confirmed that they currently meet the requirements of all appropriate measures in this section.</p> <p>The operator confirmed that the following appropriate measures are not applicable to their operations:</p> <ul style="list-style-type: none"> <li>• Section 4.2 Additional storage requirements for specific categories of WEEE except Appropriate Measure 16 regarding Small mixed WEEE (SMW)</li> </ul> <p>Improvement condition IC4, requiring the operator to submit a revised site drainage report, has not been signed off yet as complete. As this issue is being addressed by the Area Officer, the original deadline of '3 months from permit issue date' has been retained, and the compliance status of 'future compliant' has been included due to the outstanding improvement condition.</p> <p>Appropriate Measure 3 within Section 4.1 Storage locations of 'Treating metal waste in shredders: appropriate measures for permitted facilities' requires non-metallic fractions to be stored undercover, and the operator is currently not compliant with this requirement. During the review of this permit, the operator proposed permanent measures for satisfying this requirement and a timeframe for implementation which we have agreed. Improvement Condition IC14 has been inserted into the varied permit to address this. The operator also proposed interim measures for the</p>

		<p>management of environmental risk which we have also agreed with. Details of these interim measures have been included in Table S1.2.</p> <p>Compliance with the other Appropriate Measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</p>
<p><b>Waste treatment appropriate measures</b></p>	<p>FC</p>	<p>The operator confirmed that they currently meet the requirements of all appropriate measures in this section.</p> <p>The operator confirmed that the following appropriate measures are not applicable to their operations:</p> <ul style="list-style-type: none"> <li>• Section 5.1 Preparing WEEE for reuse;</li> <li>• Section 5.5 Treatment of gas discharge lamps;</li> <li>• Section 5.6 Treatment of cathode ray tube (CRT) equipment;</li> <li>• Section 5.7 Treatment of FPD equipment;</li> <li>• Section 5.9 Treatment of IT, telecommunications and business equipment; and</li> <li>• Section 5.11 Treatment of photovoltaic panels</li> </ul> <p>During the review of this permit it was identified that the operator is not currently compliant with the following appropriate measures within the guidance 'Waste temperature exchange equipment: appropriate measures for permitted facilities':</p> <ul style="list-style-type: none"> <li>• Appropriate measure 13 within Section 5.2 Stage 2 treatment (destruction) requires the operator to design, operate, and maintain their plant to maximise the removal and recovery of blowing agent and prevent emissions to the environment. The treatment process must achieve and demonstrate both of the following blowing agent removal and recovery rates:</li> </ul>



		<ul style="list-style-type: none"> <li>○ 90% or more, based upon an annual assessment of a selected sample of WTEE</li> <li>○ 80% or more, based upon a monthly assessment of the WTEE treated during that period</li> <li>● Appropriate measure 14 within Section 5.2 Stage 2 treatment (destruction) requires that the operator: must achieve and demonstrate a 99.99% destruction efficiency through your routine process and emissions monitoring, where the operator destroys recovered refrigerants or blowing agents on-site as part of the permitted treatment process, for example, using thermal or catalytic oxidation. Operation of the destruction process must be monitored continuously and recorded to demonstrate that the required destruction efficiency is always maintained.</li> </ul> <p>Improvement condition IC15 has been included in the varied permit to address this.</p> <p>Compliance with the other Appropriate Measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</p>
<p><b>Emissions control appropriate measures</b></p>	<p>FC</p>	<p>The operator confirmed that they currently meet the requirements of all appropriate measures in this section.</p> <p>Improvement condition IC3 requires the operator to demonstrate that they are preventing or minimising dust and particulate emissions, specifically in relation to the movement and handling of materials by conveyor belt. Within their Regulation 61 Notice, the operator has confirmed that they have submitted a dust management plan to support this improvement condition. However, the improvement condition has not yet been marked as complete. Improvement condition IC3 has been retained, and</p>

	<p>this issue is being addressed by the Area Officer, the original deadline of '6 months from permit issue date' has been retained.</p> <p>Improvement condition IC8 requires the operator to adopt best available techniques to ensure that the air emission from the refrigeration destruction plant are contained, channelled and abated to ensure that TVOC emissions do not exceed 15mg/m<sup>3</sup>. In their response to the Regulation 61 Notice, the operator confirmed that in July 2019 they submitted a proposal to operate a Regenerative Thermal Oxidiser (RTO) to mitigate TVOC emissions. However, the improvement condition has not yet been marked as complete. Within their Regulation 61 Notice, the operator has confirmed that they have installed the RTO and are currently carrying out monitoring for TVOC emissions. Improvement condition IC8 has been retained and this will be addressed by the Area Officer. Details of the RTO have been included within the varied permit.</p> <p>Improvement Condition IC12, requiring the operator to detail the monitoring measures in place for optimising and maintaining the operation and performance of the thermal oxidiser (RTO) has been inserted into the varied permit. This improvement condition has been included as a requirement of operating a RTO in line with Appropriate Measure 14 of 'Waste temperature exchange equipment: appropriate measures for permitted facilities' Section 5.2 Stage 2 Destruction, however the deadline for submission is based on completion of IC8 (above).</p> <p>The site does not have any channelled emissions to sewer surface water or groundwater. All surface water is directed to a treatment plant prior to redistribution across the site for re-use. Improvement Condition IC13 has been inserted into the varied permit and requires the operator to identify the maximum concentrations of potentially polluting substances in the water stream and produce a surface water management plan. This is a requirement of reusing surface water from the facility, linked to Appropriate Measures 4 and 6 of 'Treating metal waste in shredders:</p>
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		<p>appropriate measures for permitted facilities' Section 6.5 Fugitive emissions to land and water.</p> <p>Improvement Condition IC17, requiring the operator to produce a written plan to manage deflagration risk for activities AR1 and AR2, has been added to the varied permit. A deflagration management plan is required by Appropriate Measure 30 of Section 6.2 Fugitive emissions to air (including odour).</p> <p>Therefore, the compliance status of 'future compliant' has been included due to the remaining compliance with the Appropriate Measures stated above.</p> <p>Compliance with the other Appropriate Measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</p>
<p><b>Emissions monitoring and limits appropriate measures</b></p>	<p>CC</p>	<p>The operator has stated that they are not currently compliant with the Appropriate Measures within this section.</p> <p>Within their Regulation 61 Notice, the operator stated that they complied with the emission limits for dust as set in their previous permit These limits were 20 mg/m<sup>3</sup> and 10 mg/m<sup>3</sup> respectively for emission point A1 (WEEE shredder) and A2 (metal shredder). To support this, they have submitted their most recent emissions testing report which demonstrates their compliance. However, the applicable BAT AEL for dust in this case is now 5 mg/m<sup>3</sup>. This limit has been included into the revised permit notice for emission point A1 and A2, as well as A3 (WTEE shredder), which the operator will be required to comply with from the date the varied permit has been issued. Considering the results from the emissions testing report, we have no reason to believe that the operator cannot comply with these new emission limits. In this way, the compliance status of 'currently compliant' has been given for this section.</p>

		Compliance with the Appropriate Measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.
<b>Process efficiency appropriate measures</b>	CC	<p>The operator confirmed that they currently meet the requirements of all appropriate measures in this section.</p> <p>Compliance with the Appropriate Measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</p>
<b>Process monitoring appropriate measures</b>	CC	<p>Process monitoring is relevant to facilities that treat or transfer waste temperature exchange equipment (WTEE). While compliance with this section was not specifically requested in the Regulation 61 Notice, it was addressed during a request for information.</p> <p>In their response to the Request for Information the operator confirmed that they comply with all Appropriate Measures within this section. Compliance with the Appropriate Measures in this section of the guidance has been incorporated into the varied permit through the updated operating techniques listed in Table S1.2.</p>
<b>Reg 61 requirement</b>	<b>Assessment of response received</b>	
<b>Soil and groundwater risk assessment</b>	The operator has confirmed that they have not completed a soil and groundwater risk assessment (Site Condition Report) for this facility. Compliance with this will be delivered by the Area Officer where required.	
<b>Medium combustion plant and specified generators</b>	The operator has confirmed that there are no medium combustion plant or specified generators associated with their permitted facility.	

<b>Climate change</b>	The operator has not completed a climate change assessment. Climate Change adaption will be delivered through the Environmental Management System condition within the varied permit.
<b>Summary of other changes made to the permit as a result of our assessment of the Reg 61 response</b>	
<b>Change</b>	<b>Reason for change</b>
Table S1.1 has been amended to move Activity S5.4 A(1) (b) (iv) Treatment of non-hazardous metal waste and WEEE) and S5.4 A(1) (b) Treatment of metal recovered from incinerator bottom ash to the beginning of the table.	<p>The operator stated that the metal shredding activities (previously A5 and A6) are now the largest processes on site in terms of throughput and therefore they consider these activities the main activities of the site. Previously, activity S5.3 A(1) (a) (ii) Treatment of refrigeration units was considered the main activity.</p> <p>Table S1.1 has been amended to reflect this change in primary activity, and the other activities carried out on site have been relisted, each with the activity reference prefix 'AR'.</p> <p>A1 Treatment of refrigeration units: this activity is now AR5 Treatment of waste temperature exchange equipment, involving stage 1 degassing and stage 2 destruction processes.</p> <p>A2 Treatment of other hazardous non-WEEE cable, WEEE cable and WEEE (excluding refrigeration units): this activity has been split into AR3 Mechanical treatment of small mixed WEEE and AR4 Granulation of hazardous electrical and communications cable.</p> <p>A3 Treatment of waste oils: this activity has been removed (see below).</p> <p>A4 Storage of hazardous waste: this activity is now AR6 Storage of hazardous waste pending on-site treatment or off-site transfer.</p> <p>A5 Treatment of metal recovered from incinerator bottom ash: this activity is now AR2 Mechanical treatment of metal recovered from incinerator bottom ash.</p>

	<p>A6 Treatment of non-hazardous metal waste and WEEE: this activity is now AR1 Shredding of non-hazardous metal waste, large domestic appliances, and end-of-life vehicles.</p> <p>A7 Storage of raw materials including lubrication oil and diesel: this activity is now AR7.</p> <p>A8 Storage of waste pending treatment on-site: this activity has been replaced with AR9 Storage of non-hazardous waste pending treatment. Hazardous waste is stored pending treatment under AR6 Storage of hazardous waste pending on-site treatment or off-site transfer.</p> <p>A9 Storage of non-hazardous materials processed on-site: this DAA has been removed because the storage of processed materials is covered by the relevant treatment activity.</p> <p>A10 Storage of hazardous materials processed on-site, excluding temporary storage of hazardous waste under Section 5.6 A(1)(a): this DAA has been removed because the storage of processed materials is covered by the relevant treatment activity.</p> <p>A11 Post shredding treatment to aid separation of recyclables: this activity is now AR8 Physical treatment for the purpose of recycling.</p> <p>A12 Site drainage discharge: this activity is now AR11 Surface water collection, treatment and storage.</p> <p>A13 Non-hazardous Waste Transfer Station with treatment: this activity is now AR12.</p> <p>A14 Vehicle storage, depollution and dismantling (authorised treatment): this activity is now AR13.</p> <p>A15 Shredding of wastes from mechanical biological treatment (MBT) facilities: this activity is now AR14</p>
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	This amendment will not affect subsistence fees.
S5.3 A(1) (a) (ii) Treatment of waste oils has been removed.	Previously a recovery activity, the operator has described the extent of what was previously considered under this activity, which we concluded was not within the scope of a separate scheduled activity. The activities described fit within the scope of the End-of-life vehicle waste operation or the scheduled activity for storage of hazardous waste.
AR15 Metal Recycling waste operation has been added.	<p>We have included a waste operation of metal recycling to better reflect the activities undertaken at this site.</p> <p>In an email dated 20/12/2024, the operator confirmed that metal waste that is too large or heavy for the shredder is cut down to size in a shear. As this waste metal is much cleaner than other sources, after shearing the metal waste is added separately to the shredded metal output.</p> <p>As the shearing bypasses the shredder, this has been included as a separate metal recycling operation relating to sorting, separation and shearing only.</p>
The wording of IC2 has been amended to reflect the changes to the activity references.	Improvement condition IC2 previously referenced A1-A12. The activities and activity references have been amended in the varied permit and therefore IC2 has been amended to reflect the correct activities relevant to this improvement condition. The revised IC2 now reads 'AR1-AR8'. No other changes have been made to this improvement condition.
Added emissions point A3.	The operator has installed a Regenerative Thermal Oxidiser (RTO) in response to the improvement condition IC8. While this improvement condition has not yet been completed, we have taken the decision to include reference to this new emission point within the permit. A new improvement condition, IC12, has been added requiring the operator to provide measures to monitor the RTO, and the required parameters have been added to Table S3.1. Please refer to the section on emission limits below.

Site plan referenced in Schedule 7 has been replaced.	The operator has provided a new site plan to reflect the new emission point (A3).
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## **Decision Considerations**

### **Confidential information**

A claim for commercial or industrial confidentiality has not been made.

### **Identifying confidential information**

We have not identified information provided as part of the Regulation 61 notice response that we consider to be confidential.

The decision was taken in accordance with our guidance on confidentiality.

### **The regulated facility**

We considered the extent and nature of the facilities at the site in accordance with RGN2 'Understanding the meaning of regulated facility', and Appendix 2 of RGN2 'Defining the scope of the installation'.

### **The site**

The operator has provided a plan which we consider to be satisfactory.

These show the extent of the site of the facility including the discharge points.

The plan is included in the permit.

### **Operating techniques**

We have reviewed the techniques used by the operator and compared these with the relevant guidance notes and we consider them to represent appropriate techniques for the facility.

The operating techniques that the applicant must use are specified in S1.2 in the environmental permit.

### **Changes to the permit conditions**

We have updated permit conditions to those in the current generic permit template as part of permit consolidation. The conditions will provide the same level of protection as those in the previous permit.

### **Improvement programme**

We have included an improvement programme to ensure that the operator:

- Provides information in order to demonstrate compliance with the relevant Appropriate Measures guidance (IC10);
- Update their H1 assessment and emissions inventory (IC11);
- Monitor the thermal oxidiser (RTO) serving the WTEE destruction plant (IC12);
- Provide a surface water management plan (IC13);
- Store shredder metallic fractions undercover (IC14);
- Identify and implement proposals to monitor the efficiency of their WTEE treatment plant for destruction of blowing agent gases (IC15);
- Provide a Fire Prevention Plan (IC16); and
- Provide a Deflagration Management Plan (IC17).

Improvement conditions IC1, IC2, IC3, IC4, IC6, IC8, and IC9 have been retained. These improvement conditions were issued with previous variations to the permit and have not yet been completed. Further information is presented in Table 1.

Improvement condition IC5 has been removed because the permit no longer includes a discharge to surface water.

Improvement condition IC7 has been removed because it is no longer relevant. In response to this improvement condition, the operator installed the Donaldson filter and regenerative thermal oxidiser (RTO). Improvement conditions have been added to address the changes to how the operator manages the emissions to air.

## Changes to EWC codes

The following changes to EWC codes have been made:

- The layout and numbering of the tables have been amended in line with the changes made to activities in Table S1.1
- 09 01 10 and 09 01 12 have been removed from Table S2.2 (metal shredding) because they were confirmed as accepted for transfer only. These codes are present within Table S2.8 (non-hazardous waste transfer and treatment)
- 17 04 11 has been moved from S2.2 (metal shredding) to S2.5 (cable granulation)
- 16 02 14 and 20 01 36 has been added to Table S2.3 (WEEE ATF). This has been done in line with the current requirements for the sector regarding dual-coding of mirror waste streams.
- 16 02 13\* and 20 01 35\* have been amended to exclude refrigeration equipment, display equipment, lightbulbs and lamps within Table S2.4.
- 16 02 13\* and 20 01 35\* have been amended to refer only to display equipment, lightbulbs and lamps within Table S2.7

## Emission limits

Emission Limit Values (ELV's), based on Best Available Techniques – Achievable Emission Levels (BAT-AELS) for Waste Treatment, have been amended for the following substances:

A1 (metal shredder) and A2 (WEEE shredder and granulator):

- Dust

Parameters with no limit set, based on Best Available Techniques – Achievable Emission Levels (BAT-AELS) for Waste Treatment, have been added for the following substances:

A1 (metal shredder) and A2 (WEEE shredder and granulator):

- Total VOCs
- Brominated flame retardants
- Dioxin-like polychlorinated biphenyls (PCBs)
- Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V)
- Dioxins and furans (PCDD/F)

Emission point A3, related to the WTEE treatment plant (AR5) is a new emission point added as a result of the changes made by the operator in order to comply with improvement condition IC8. The following parameters and Emission Limit Values (ELV's), based on Best Available Techniques – Achievable Emission Levels (BAT-AELS) for Waste Treatment have been added to this emission point:

- Dust - 5 mg/m<sup>3</sup>
- CFCs - 10 mg/m<sup>3</sup>
- Total VOCs (concentration) - 15 mg/m<sup>3</sup>
- Total VOCs (mass emission) - Mass loss limit, set on a pro-rata basis, based upon a mass limit of 5g per 100 units treated per hour
- Air flow - no limit set
- Brominated flame retardants - no limit set
- Dioxin-like polychlorinated biphenyls (PCBs) - no limit set
- Metals (As, Cd, Co, Cr, Cu, Mn, Ni, Pb, Sb, Se, Tl, V) - no limit set
- Dioxins and furans (PCDD/F) - no limit set
- Oxides of nitrogen - 130 mg/m<sup>3</sup> (specific to the Regenerative Thermal Oxidiser)
- Carbon monoxide - no limit set (specific to the Regenerative Thermal Oxidiser)

## Monitoring

We have decided that monitoring should be added for the following parameters, using the methods detailed and to the frequencies specified:

- WTEE treated in stage 1 process including the unit type, refrigerant type, and the number of defective units
- Quantity of refrigerant collected over reporting period under WTEE stage 1 degassing
- Concentration of refrigerant in the oil (% w/w) under WTEE stage 1 degassing
- Refrigerant recovery, based upon mass balance calculation under WTEE stage 1 degassing
- Mass (kg) under WTEE stage 2 destruction
- Lower Explosive Limit (LEL) or Limiting Oxygen Concentration (LOC) under WTEE stage 2 destruction
- Quantity of foam remaining on the granulated metal after treatment (%w/w) under WTEE stage 2 destruction
- Quantity of foam remaining on the granulated plastic after treatment (%w/w) under WTEE stage 2 destruction
- Quantity of residual blowing agents remaining in the foam after treatment (%w/w) under WTEE stage 2 destruction
- Blowing agent recovered as a percentage of the theoretical content of the waste treated under WTEE stage 2 destruction
- Residual wastes removed from the site for the WTEE activity
- Mass balance under all mechanical treatment of WEEE
- Mercury under the finest non-metallic fraction from the mechanical treatment of SMW
- Cadmium under the finest non-metallic fraction from the mechanical treatment of SMW
- Destruction of blowing agent gases from stage 2 WTEE treatment in regenerative thermal oxidiser (RTO)
- Surface water treatment:
  - Arsenic (expressed as As)
  - Cadmium (expressed as Cd)
  - Chromium (expressed as Cr)
  - Copper (expressed as Cu)
  - Lead (expressed as Pb)
  - Mercury (expressed as Hg)
  - Nickel (expressed as Ni)
  - PFOA
  - PFOS
  - Deca BDE

- Total organic carbon (TOC) or Chemical oxygen demand (COD) (Note 2)
- Total suspended solids (TSS)
- Zinc (expressed as Zn)

We have decided that monitoring should be deleted for the following parameters:

- Volume of the panel processed for the record of insulation panel foam destruction

This decision has been taken because the operator does not accept insulation panels

These monitoring requirements have been included in order to implement the requirements of the Appropriate Measures for waste electrical and electronic equipment (WEEE), waste temperature exchange equipment, and treating metal waste in shredders.

We made these decisions in accordance with Best Available Techniques for Waste Treatment.

## Reporting

We have deleted reporting in the permit for the following parameters:

- For the Treatment of Refrigeration units the results of independent conformance testing of emissions to air (CFCs, other Volatile Organic Compounds and particulates) as required by table S3.1 because this is now included within the other reporting parameters.
- A summary of the wastes processed and the efficiency of the processing operations, in the format of Appendix B, because reference to Appendix B is now included in Table S4.4.
- A summary of the residual materials conformance testing, in the format of Appendix C, because reference to Appendix C is now included in Table S4.4.

We have added reporting in the permit for the following parameters:

- Process monitoring
- WTEE treatment
- Ferrous metal recovered
- Non-ferrous metal recovered
- Other fractions recovered
- Non-metallic shredder residue

We have amended reporting in the permit for the following parameters:

- For Activity A1 the Treatment of Refrigeration units a summary of the residual waste materials removed from site, in the format of Appendix A. This has now been split into its constituent parts.

We made these decisions in accordance with Best Available Techniques for Waste Treatment.

## **Growth Duty**

We have considered our duty to have regard to the desirability of promoting economic growth set out in section 108(1) of the Deregulation Act 2015 and the guidance issued under section 100 of that Act in deciding whether to grant the variation of this permit.

Paragraph 1.3 of the guidance says:

“The primary role of regulators, in delivering regulation, is to achieve the regulatory outcomes for which they are responsible. For a number of regulators, these regulatory outcomes include an explicit reference to development or growth. The growth duty establishes economic growth as a factor that all specified regulators should have regard to, alongside the delivery of the protections set out in the relevant legislation.”

We have addressed the legislative requirements and environmental standards to be set for this operation in the body of the decision document above. The guidance is clear at paragraph 1.5 that the growth duty does not legitimise non-compliance and its purpose is not to achieve or pursue economic growth at the expense of necessary protections.

We consider the requirements and standards we have set in this permit are reasonable and necessary to avoid a risk of an unacceptable level of pollution. This also promotes growth amongst legitimate operators because the standards applied to the operator are consistent across businesses in this sector and have been set to achieve the required legislative standards.